

# **City of Angels**



## **Code of Safe Practices**

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## GENERAL

1. All persons shall follow this code of safe practices, render every possible aid to safe operations, and report all unsafe conditions or practices to the proper authority. Unsafe practices or conditions shall be reported to your supervisor at once.
2. Inexperienced employees shall be given extra attention by all other employees in regard to safe work practices.
3. Do not operate any tool or piece of equipment without being trained on the safe use of it.
4. Supervisors shall insist on employees observing and obeying all rules, regulations, and orders, as necessary, to the safe conduct of work and shall take such action, as necessary, to obtain observance.
5. When operating company vehicles or personal vehicles for company work, obey all motor vehicle laws and seat belts must be worn.
6. Horseplay, scuffling, and other acts which tend to have an adverse influence on the safety and well-being of employees are prohibited.
7. No smoking in any building, within 20' of any doorway or window to any City facility, within 25' of another person, or in vehicles. Proper receptacles shall be used for putting out smoking materials.
8. Work shall be pre-planned and documented. Work shall be well planned and supervised to forestall injuries in the handling of heavy objects and when working with equipment.
9. All injuries shall be reported promptly to a supervisor, so that arrangements can be made for first aid or medical attention. Weekend and call back employees when injured will seek medical attention first. As soon as possible the employee will report any injury in accordance to the Injury and Illness Prevention Plan.
10. No employee shall knowingly be permitted or be required to work while their ability or alertness is so impaired by fatigue, illness, or other causes that it may unnecessarily expose them or others to injury.
11. Any medication taken by the employee while under employ will be reported to the supervisor if that drug can impair their ability to operate machinery or could make it a danger to themselves or others.
12. Anyone known to be under the influence of intoxicating liquor or drugs shall not be allowed on the job while in that condition.

13. When lifting heavy objects, use the large muscles of the legs instead of the smaller muscles of the back. Avoid overloads, use mechanical aids or another worker to help with the work.
14. Employees shall not handle or tamper with electrical equipment, machinery, or air or water lines unless they have received proper instructions and/or training.
15. **Lock Out/Block Out applies to all maintenance procedures.**

## **HOUSEKEEPING**

1. All employees parking their personal vehicle on the premises shall park their vehicle in the designated parking area. Their vehicle shall be parked in between the lines of the individual spaces. Be courteous and leave plenty of space between your vehicle and the adjacent lines.
2. Good housekeeping must be practiced at all times on the job site.
3. Scrap lumber and debris must be kept reasonably clear from all work surfaces and work areas.
4. Aisles shall be kept clear at all times.
5. Oil or other fluids shall be cleaned up immediately.
6. Avoid prolonged idling of vehicles inside the building.
7. Gasoline shall not be used for cleaning purposes.
8. Piled or stacked materials must be placed in stable stacks to prevent it from falling, slipping, or collapsing.

### ***§1549 – Piling Material applies from Cal/OSHA***

## **PERSONAL PROTECTIVE EQUIPMENT**

The City of Angels provides personal protective equipment for use by their employees. Notify your supervisor immediately whenever such equipment is missing or inadequate.

### **General Facts**

1. Protection where modified by the words head, eye, body, hand, and foot, as required by the orders in this article means the safeguarding obtained by means of safety devices and safeguards of the proper type for the exposure and of such design, strength and quality as to eliminate, preclude or mitigate the hazard.

**NOTE:** In order that safety devices or safeguards, which may include personal protective equipment, be acceptable as to proper type, design, strength and quality they shall be at least equivalent to those complying with the standards approved by The American National Standards Institute. Bureau

of Standards, or other recognized authorities, except that where no authoritative standard exists for a safety device or safeguard, the use of such safeguard or safety device shall be subject to inspection and acceptance or rejection by the City.

2. Protective equipment shall be distinctly marked so as to facilitate identification of the manufacturer.

**EXCEPTION:** City manufactured shields, barriers, etc.

3. The City shall assure that the employee is instructed and uses protective equipment in accordance with the manufacturer's instructions.
4. The City shall assure that employee-owned personal protective equipment complies with standards and regulations prescribed by the Division of Industrial Safety. The City shall assure this equipment is maintained in a safe, sanitary condition.
5. Protectors shall be of such design, fit and durability as to provide adequate protection against the hazards for which they are designed. They shall be reasonably comfortable and shall not unduly encumber the employee's movements necessary to perform his work.

### **Head Protection**

1. Head protection (hard hat) is required when there is exposure to flying/falling or failing structures.
2. Hard hats shall be worn at all construction sites, around any equipment operations and at all work sites under control of others.
3. Combination safety helmet (ear, face and head protection) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could drop or cause falling objects, cause hearing loss, or eye injury.

### ***§3381 – Head Protection applies from Cal/OSHA***

### **Eye and Face Protection**

1. Eye protection (goggles, safety glasses, face shields) are required where there is a probability of eye injury from airborne debris, dust, flying particles, chips, chemicals, heat or light rays, at all constructions sites, around any equipment operations and at all work sites under control of others. Side shield protection shall be used whenever the hazard of flying objects is angular as well as frontal.
2. **All prescription safety glasses will have side shields installed at all times.**
3. Employees working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays which are inherent in the

work or environment, shall be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby employees.

4. The City shall provide and ensure that employees use protection suitable for the exposure.
5. Eye protection shall be worn at all construction sites, around any equipment operations and at all work sites under control of others.

#### ***§3382 – Eye and Face Protection applies from Cal/OSHA***

#### **Body Protection**

1. Body protection may be required for employees whose work exposes parts of their body, not otherwise protected as required by other orders in this article, to hazardous or flying substances or objects.
2. Leg protection (chaps, pads, or inserts) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could cut or puncture the skin.

#### ***§6283(a) – Portable Chain Saw Operations applies from Cal/OSHA***

3. Splash suits are provided and will be worn any time the need arises.
4. Clothing appropriate for the work being done shall be worn. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can be entangled in moving machinery shall not be worn.
5. Clothing saturated or impregnated with flammable liquids, corrosive substances, irritants or oxidizing agents shall be removed and shall not be worn until properly cleaned.
6. Clothing appropriate for work must be worn. ANSI approved outerwear are required when working in and around traffic.
7. ANSI rain gear shall be worn in inclement weather.
8. ANSI approved outerwear shall be worn at all construction sites, around any equipment operations and at all work sites under control or others.

#### ***§3383 – Body Protection applies from Cal/OSHA***

## **Hand Protection**

1. Hand protection shall be required for employees whose work involves unusual and excessive exposure of hands to cuts, burns, harmful physical or chemical agents or radioactive materials which are encountered and capable of causing injury or impairments.
2. Rubber gloves will be worn while working with sewage and while using any equipment required on a sewage related assignment.
3. Hand protection, such as gloves, shall not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials.

**NOTE 1:** As used in this section, the term entangled refers to hand protection (gloves) being caught and pulled into the danger zone of machinery or equipment. Use of hand protection around smooth surfaced rotating equipment does not constitute an entanglement hazard if it is unlikely that the hand protection will be drawn into the danger zone.

**NOTE 2:** Wrist watches, rings, or other jewelry should not be worn while working with or around machinery with moving parts in which such objects may be caught, or around electrically energized equipment.

4. Employees shall wash thoroughly after handling injurious, infectious or poisonous substances, and follow all special instructions regarding the safe handling of such substances. Hands should be washed thoroughly prior to eating.
5. Hand protection shall be at all construction sites, around any equipment operations and at all work sites under control of others.

### ***§3384 – Hand Protection applies from Cal/OSHA***

## **Foot Protection**

1. Foot protection (safety boots or shoes) are required at all times.
2. Appropriate foot protection shall be required for employees who are exposed to foot injuries from electrical hazards, hot, corrosive, poisonous substances, falling objects, crushing or penetrating actions, which may cause injuries or who are required to work in abnormally wet locations.
3. Footwear which is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injuries shall not be worn.
4. Protective footwear for employees purchased after January 12, 1995 shall meet the requirements and specifications in the American National Standard for Personal Protection-Protective Footwear, Z41 1991, which is hereby incorporated by reference.

5. While conducting meter reading duties employees can wear athletic shoes as long as they meet the requirements and specifications in the American National Standard for Personal Protection-Protective Footwear, Z41 1991, which is hereby incorporated by reference.
6. Foot protection shall be worn at all construction sites, around any equipment operations and at all work sites under control of others.

***§3385 – Foot Protection applies from Cal/OSHA***

**Jewelry**

Wrist watches, rings, or other jewelry should not be worn while working with or around machinery with moving parts in which such objects may be caught, or around electrically energized equipment.

**NOTE:** Authority and reference cited: Section 142.3, Labor Code.

***§3384 – Hand Protection, NOTE 2 applies from Cal/OSHA***

**Sanitation**

Protectors shall be capable of being cleaned easily and disinfected. These protectors shall be kept clean and in good repair. Safety devices, including protective clothing worn by the employee, shall not be interchanged among employees until properly cleaned. Where the division has determined that ordinary cleaning will not remove risk of infection, additional precautionary measures may be required.

**EXCEPTION:** Safety devices worn over shoes or outer clothing, no part of which contacts the skin of the wearer, such as metal foot guards.

***§3387 – Sanitation applies from Cal/OSHA***

**Life Rings and Personal Flotation Devices**

At any time an employee works exposes them to the hazard of drowning the following applies:

1. At least one U.S. Coast Guard approved 30-inch life ring with not less than 90 feet of 600 pound capacity line attached shall be kept in a conveniently accessible place where employees work exposes them to the hazard of drowning or each employee so exposed shall wear a U.S. Coast Guard approved personal flotation device.

**EXCEPTION:** Flume Patrol. Flumes provided with caps as described in Section 3207.

2. Any personal flotation device shall be approved by the United States Coast Guard as a Type I PFD, Type II PFD, Type III PFD, or their equivalent, pursuant to 46 CFR

160 (Coast Guard Lifesaving Equipment Specifications) and 33 CFR 175.23 (Coast Guard table of devices equivalent to personal flotation devices).

3. Personal flotation devices shall be maintained in good condition. They shall be removed from service when damaged so as to affect their buoyant properties or capability of being fastened.

***§3389 – Life Rings and Personal Flotation Devices applies from Cal/OSHA***

**Protection from Electric Shock**

Protection from electric shock shall be provided and used as required by the High-and-Low-Voltage Electrical Safety Orders.

***§3390 – Protection from Electric Shock applies from Cal/OSHA***

**Medical Services and First Aid**

1. The City shall ensure the ready availability of medical personnel for advice and consultation on matters of industrial health or injury.
2. In the absence of an infirmary, clinic, or hospital, in near proximity to the workplace, which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Training shall be equal to that of the American Red Cross or the Mining Enforcement and Safety Administration.
3. There shall be adequate first-aid materials, approved by the consulting physician, readily available for workmen on every job. Such materials shall be kept in a sanitary and usable condition. A frequent inspection shall be made of all first-aid materials, which shall be replenished as necessary.
4. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
5. Stretchers and blankets, or other adequate warm covering, may be required by the Division, unless ambulance service is available within 30 minutes under normal conditions.
6. At isolated location, provisions must be made in advance for prompt medical attention in case of serious injuries. This may be accomplished by on-the-site facilities or proper equipment for prompt transportation of the injured person to a physician or a telephone communication system for contacting a doctor or combinations of these that will avoid unnecessary delay in treatment.

***§3400 – Medical Services and First Aid applies from Cal/OSHA***

## **Hearing Protection**

1. Hearing protection (ear plugs or ear muffs) are required when the noise level exceeds allowable exposure limits and wherever required by the supervisor.
2. Hearing protection shall be worn at all construction sites, around any equipment operations and at all work sites under control of others.
3. Ear Protection. Occupational exposure to noise shall be in accordance with CCR, Title 8, Article 105 of the General Industry Safety Orders. When required ear protection shall be provided by the City and shall be worn by the employee. Employees and other persons shall be informed of the locations where ear protection is required. Whenever the operations reasonably permit, exposures to excessive noise shall be eliminated or at least reduced by engineering or administrative controls.
  - a. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the City.
  - b. The City shall provide training in the use and care of all hearing protectors provided to employees.
  - c. The City shall ensure proper initial fitting and supervise the correct use of all hearing protectors.
4. Hearing Protector Attenuation
  - a. The City shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The City shall use one of the methods described in Appendix E of the GISO, Methods for Estimating the Adequacy of Hearing Protector Attenuation.
  - b. Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by Section 5096(b).
  - c. For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposures to an 8-hour time-weighted average of 85 decibels or below.
  - d. The adequacy of hearing protector attenuation shall be reevaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. The City shall provide more effective hearing protectors where necessary.

**§8414(g) – Personal Protective Equipment applies from Cal/OSHA**

## **Respirator Protection**

1. Breathing protection (respirators, dust masks) is required when there is a probability of airborne dust, mists, or vapors. Use proper type of equipment for the work you are doing.
2. When it is impractical to remove harmful dusts, fumes, mists, vapors, or gases or where emergency protection against occasional and/or relatively brief exposure is needed, the City shall provide, and the employee exposed to such hazard shall use, respiratory protective equipment as prescribed in Section 5144.
3. As needed respirator protection shall be worn at all construction sites, around any equipment operations and at all work sites under control of others.

### ***§8414(i) – Personal Protective Equipment applies from Cal/OSHA***

## **TRAFFIC CONTROL**

### **Traffic Control for Public Streets and Highways**

1. Where a hazard exists to employees because of traffic or haulage conditions at work sites that encroach upon public streets or highways, a system of traffic controls in conformance with the “Manual of Traffic Controls for Construction and Maintenance Work Zones – 1996” which is herein incorporated by reference and referred to as the “Manual”, published by the State Department of Transportation, shall be required so as to abate the hazard – see dot.ca.gov for updates.

**NOTE:** Additional means of traffic control, such as continuous patrol, detours, barricades, or other techniques for the safety of employees may be employed. Criteria for position, location and use of traffic control devices described in the “Manual” are not mandatory. It is furnished solely for the purpose of guidance and information.

2. Specifications for the size and design of signs, lights, and devices used for traffic control shall be as described in the “Manual”, published by the State Department of Transportation pursuant to the provisions of California Vehicle Code Section 21400 and, which is incorporated by the reference.

**NOTE:** The “Manual” may be obtained at any Division office or from the Department of Transportation.

3. Employees (on foot) exposed to the hazard of vehicular traffic shall wear orange, strong yellow-green, or fluorescent versions of these colored warning garments such as vest, jackets, or shirts. During rainy weather, employees exposed to the hazard of vehicular traffic may wear orange, strong yellow-green or yellow rainwear.
4. During hours of darkness, warning garments shall be retro reflective. The retro reflective material shall be visible at a minimum of 1,000 feet. The retro reflective

clothing, or the retro reflective material added to the clothing, shall have a minimum of one horizontal stripe around the torso. White outer garments with retro reflective material that meets the above requirements may be worn during hours of darkness in lieu of colored vests, jackets and/or shirts.

### **Flaggers**

1. Flaggers shall be utilized at locations on a construction site where barricades and warning signs cannot control the moving traffic.
2. When flaggers are required, they shall be placed in relation to the equipment or operation so as to give effective warning.
3. Placement of warning signs shall be according to the “Manual of Traffic Controls for Construction and Maintenance Work Zones-1996”, published by the State Department of Transportation, which is herein incorporated by reference and referred to as the “Manual”.
4. Flaggers shall wear orange, strong yellow-green or fluorescent versions of these colored warning garments such as vest, jackets, or shirts. Rainwear, when worn, shall be orange, strong yellow-green, or yellow.
5. During hours of darkness, flaggers’ stations shall be illuminated such that the flagger will be clearly visible to approaching traffic and flaggers shall be outfitted with reflectorized garments. The retro reflective material shall be visible at a minimum of 1,000 feet. The retro reflective clothing, or the retro reflective material added to the clothing, shall have a minimum of one horizontal stripe around the torso. White outer garments with retro reflective material that meets the above requirements may be worn during hours of darkness in lieu of colored vests, jackets and/or shirts.
6. Flaggers shall be trained in the proper fundamentals of flagging moving traffic before being assigned as flaggers. Signaling directions used by flaggers shall conform to the “Manual”. The training and instructions shall be based on the “Manual” and work site conditions and also include the following:
  - a. flagger equipment which must be used,
  - b. layout of the work zone and flagging station,
  - c. methods to signal traffic to stop, proceed or slow down,
  - d. methods of one-way traffic control,
  - e. trainee demonstration of proper flagging methodology and operations,
  - f. emergency vehicles traveling through the work zone,
  - g. handling emergency situation,
  - h. methods of dealing with hostile drivers,
  - i. flagging procedures when a single flagger is used (when applicable).
7. Documentation of the training shall be maintained as required by Section 3203, Injury Illness and Prevention Program of the General Industry Safety Orders.

8. Flaggers shall be trained by persons with the qualifications and experience necessary to effectively instruct the employee in the proper fundamentals of flagging moving traffic.

### **Warning Devices**

While working within the traffic right-of-way, warning signs shall be placed at each approach to the work zone prior to work starting. 36" reflectorized cones shall be used to mark work areas and designate traffic routes.

"Manual of Traffic Controls for Construction and Maintenance Work Zones-1996" published by the State Department of Transportation.

***§1598 – Traffic Control for Public Streets and Highways applies from Cal/OSHA***

***§1599 – Flaggers applies from Cal/OSHA***

### **EXCAVATIONS AND TRENCHES**

1. Underground Service Alert (USA) shall be called prior to excavating.
2. Pre-locating of the City's utilities shall be done prior to excavating.
3. All excavations over 5 feet in depth **MUST** be assessed by a trained competent person and sloped or shored according to OSHA regulations.
4. All shoring forms, manufactures tabulated data, code of safe practice, shoring supplement hand book, and shoring must be on site and in place prior to trench entry by personnel.
5. All excavations over 5 feet deep must be inspected daily by a competent person, and must be re-inspected whenever conditions change due to water, soil type, rain or vibration, etc.
6. All spoil or backfill must be kept at least 2 feet from the edge of the excavation.
7. An exit (ladder) must be provided for all occupied excavations 4 of more feet deep. The exits must be at no greater than 25 foot intervals.
8. All excavations shall be covered whenever they are left unattended.
9. All excavations in the traffic lanes must be covered with a suitable plate. Whenever possible, excavations shall be backfilled by the end of the day.
10. Where a hazard to workers exists because of vehicular traffic, controls such as detours, warning signs, or barricades must be used and maintained. Flag-persons shall be required when controls are ineffective or when only one lane of traffic is opened.

***§1598 – Traffic Control for Public Streets and Highways applies from Cal/OSHA***  
***§1599 – Flaggers applies from Cal/OSHA***

**ELECTRICAL REQUIREMENTS FOR CONSTRUCTION WORK**

1. Only qualified persons shall work on electrical equipment or systems.
2. Only qualified persons shall be permitted to perform any function in proximity to energized overhead conductors unless means to prevent accidental contact have been provided in accordance with Section 3 and 4 of these orders.

**Summary of Lockout/Blockout Policy**

1. All tags need to have the employees name on them before they are used, all locks will also be identified by the employee.
2. “One Lock One Key” is to be used at all times. Use a multiple lock device.
3. Never give your key or lock to another person.
4. If you cannot apply a lock immediately contact your supervisor.
5. Determine what energy sources will need to be locked out.
6. Determine which sequence will be used to assure no damage to the equipment and yourself.
7. Determine who will need to apply locks and tags. Use the buddy system if another employee is working with you. All employees working on the equipment need to place a tag and lock on the equipment to be worked on.
8. All electrical equipment will be locked and tagged out at the power source. Plugged in equipment will use a plug shield lock.
9. The circuits to be worked on will be tested with an approved test prior to starting maintenance.
10. Blocking or blanking of any energy source is required.
11. Any valved energy sources will be locked out and tagged; this includes water, air, steam, hydraulic or pump valves.
12. Be sure all stored energy is relieved from all systems prior to starting any maintenance.
13. Follow the City’s approved maintenance procedures.

14. Remove any blocking prior to the next step.
15. Before removing locks and tags all employees involved must meet at the lock/tag location prior to removing them to be accounted for.
16. All guards shall be in place, and all tools accounted for.
17. Workers are positioned safely prior to energizing.
18. All controls are in the neutral or off position.
19. Now you can reenergize the equipment.

## **OPERATIONAL RULES FOR LOW VOLTAGE ELECTRICAL WORK**

### **Energized Equipment or Systems**

1. Work shall not be performed on exposed energized parts of equipment or systems until the following conditions are met:
  - a. Responsible supervision has determined that the work is to be performed while the equipment or systems are energized.
  - b. Involved personnel have received instructions on the work techniques and hazards involved in working on energized equipment.
  - c. Suitable personal protective equipment and safeguards (i.e., approved insulated gloves or insulated tools) are provided and used.
2. Rubber insulating gloves shall meet the provisions of the American Society for Testing Materials (ASTM) D 120-95, Standard Specification for Rubber Insulating Gloves, which is hereby incorporated by reference.
3. Insulated tools shall meet the provisions of the American Society for Testing Materials (ASTM) F 1505-94, Standard Specification for Insulated and Insulating Hand Tools, which is hereby incorporated by reference.
4. Approved insulated gloves shall be worn for voltages in excess of 250 volts to ground.
5. Suitable barriers or approved insulating material shall be provided and used to prevent accidental contact with energized parts.
6. Suitable eye protection has been provided and is used.
7. Where required for personnel protection, suitable barricades, tags, or signs are in place.

8. Each employee who is exposed to the hazard of flames or electric arcs wears apparel that, when exposed to flames or electric arcs, does not increase the extent of injury that would be sustained by the employee. This subsection prohibits clothing made from the following types of fabrics, either alone or in blends, unless the employee can demonstrate that the fabric has been treated with flame retardant, acetate, nylon, polyester, and rayon.
9. After the required work on an energized system or equipment has been completed, an authorized person shall be responsible for:
  - a. Removing from the work area any temporary personnel protective equipment, and
  - b. Reinstalling all permanent barriers or covers.

### **Tests**

All electrical equipment and systems shall be treated as energized as required by Section 2320.2 until tested or otherwise proven to be de-energized.

### **De-Energized Equipment or Systems**

1. An authorized person shall be responsible for the following before working on de-energized electrical equipment or systems unless the equipment is physically removed from the wiring system:
  - a. Notifying all involved personnel.
  - b. Locking the disconnecting means in the "open" position with the use of lockable devices, such as padlocks, combination locks or disconnecting of the conductor(s) or other positive methods or procedures which will effectively prevent unexpected or inadvertent energizing of a designated circuit, equipment or appliance.
  - c. Tagging the disconnecting means with suitable accident prevention tags conforming to the provisions of Accident Prevention Tags.
  - d. Effectively blocking the operation or dissipating the energy of all stored energy devices which present a hazard, such as capacitors or pneumatic, spring-loaded and like mechanisms.

### **Energizing (or Re-Energizing) Equipment or Systems**

1. An authorized person shall be responsible for the following before energizing equipment or systems which have been de-energized:
  - a. Determining that all persons are clear from hazards which might result from the equipment or systems being energized.
  - b. Removing locking devices and tags.
2. Locking devices and tags may be removed only by the employee who placed them. Locking devices and tags shall be removed upon completion of the work and after the installation of the protective guards and/or safety interlock systems.

**EXCEPTION:** When the employee has left the premises or is otherwise unavailable, other persons may be authorized by the City to remove the locking devices and tags in accordance with a procedure determined by the City.

### **Accident Prevention Tags**

Suitable accident prevention tags shall be used to control a specific hazard. Such tags shall provide the following minimum information:

1. Reason for placing tag.
2. Name of person placing the tag and how that person may be contacted.
3. Date tag was placed.

### **Safety Precautions**

1. Suitable temporary barriers, or barricades, shall be installed when access to opened enclosures containing exposed energized electrical equipment is not under the control of an authorized person.
2. Conductive measuring tapes, ropes or similar measuring devices shall not be used when working on or near exposed energized conductors or parts of equipment.
3. Conductive fish tapes shall not be used in raceways entering enclosures containing exposed energized parts unless such parts are isolated by suitable barriers.
4. Prior to climbing poles or other elevated structures supporting overhead electrical lines or equipment, an inspection shall be made to assure that such poles or structures are in safe condition for the work to be performed. Where poles or structures are determined to be unsafe for climbing, they shall not be climbed until made safe by guying, bracing or other adequate means.

## **Fall Protection**

Fall protection. When work is performed at elevated location more than 4 feet (1.2 meters) above the ground on poles, towers or similar structures, the City shall require the employees to use either fall arrest equipment, work positioning equipment, or travel restricting equipment, if other fall protection methods have not been provided (e.g., guardrails, safety nets, etc.). The use of body belts for fall arrest systems is prohibited.

**EXCEPTION:** Point to point travel by a qualified person, unless conditions such as ice, high winds, design of the structure, or other condition (e.g., chemical contaminants) prevents the employee from gaining a firm hand or foothold while traveling.

## **Backfeeding or Interconnection**

1. No electrical power source, permanent or temporary, shall be connected to a premise wiring system, or parts of such a system, unless positive means are used to prevent the transmission of electricity beyond the premises wiring system, or beyond any intentionally segregated parts of such system.
2. **Lockout/Blockout applies with all maintenance procedures.**

***§2320.1 – General applies from Cal/OSHA***

***§2320.3 – Tests applies from Cal/OSHA***

***§2320.4 – De-Energized Equipment or Systems applies from Cal/OSHA***

***§2320.5 – Energizing (or Re-Energizing) Equipment or Systems  
Cal/OSHA***

***§2320.6 – Accident Prevention Tags applies from Cal/OSHA***

***§2320.7 – Safety Precautions applies from Cal/OSHA***

***§2320.8 – Fall Protection applies from Cal/OSHA***

***§2320.9 – Backfeeding or Interconnection applies from Cal/OSHA***

## **HAND TOOLS**

1. Hand tools shall be kept clean and in good repair. Tools having mushroomed heads, split or defective handles, worn parts, or other defects that impairs their strength shall be removed from service and shall not be used until they are repaired or replaced.
2. Pipe wrenches shall not be used as a substitute for other wrenches.
3. Torque wrenches will be returned to the “0” setting prior to storage.
4. Wrenches shall not be altered by the use of handle extensions or “cheaters”.

**EXCEPTION:** Water meter turn off tools/wrenches can be used with a cheater due to limited space of the Water Meter Box dimensions.

5. Files and rasps shall be equipped with handles and shall not be used as a punch or chisel.
6. Screwdrivers shall not be used as a chisel or pry.

***§1699 – Hand Tools applies from Cal/OSHA***

***§3426 – Hand Tools applies from Cal/OSHA***

***§3456 – Hand-Held Tools applies from Cal/OSHA***

## **LADDERS**

### **Fall Protection**

1. Fall protection. When work is performed at elevated location more than 4 feet (1.2 meters) above the ground on poles, towers or similar structures, the City shall require the employees to use either fall arrest equipment, work positioning equipment, or travel restricting equipment, if other fall protection methods have not been provided (e.g., guardrails, safety nets, etc.). The use of body belts for fall arrest systems is prohibited.

**EXCEPTION:** Point to point travel by a qualified person, unless conditions such as ice, high winds, design of the structure, or other condition (e.g., chemical contaminants) prevents the employee from gaining a firm hand or foothold while traveling.

2. Always be careful to avoid loading a ladder to deflection in the middle. Unless there are handholds provided, the side rails of all ladders used to serve a platform shall extend at least 3 feet above the upper landing. Ladders others than step ladders must be secured so that they do not slip. Be sure ladders are in sound working condition before using.
3. Check weight rating prior to using any ladder. Never use a ladder rated less than the weight of your body plus the weight of the tools or material you will have with you.

***§2320.8 – Fall Protection applies from Cal/OSHA***

## POWER TOOLS

1. The following power tools must be equipped with a constant contact “on-off” switch:
  - a. Drills
  - b. Disc and belts sanders
  - c. Grinders (hand held)
  - d. Reciprocating and Saber Saws
  - e. Circular Saws
  - f. Router
  - g. Electric Impact Wrench
  - h. Buffer/Scrubber
2. Electric powered tools shall be grounded and should be kept out of wet locations.
3. Don’t abuse power cords. Inspect the power cords before use. Don’t use the cord or tool if the insulation is damaged. Never carry power tools by the cord or yank it to disconnect it from a receptacle. Electric power tools shall not be hoisted or lowered by their power cords.
4. Disconnect tools from power supplies when not in use, before servicing, and when changing blades, bits, cutters, etc. Use lock out plug boxes if you cannot maintain control of the plug yourself or it is in another location away from view, or you are going to leave the unit unattended.
5. **Lockout/Blockout applies with all maintenance procedures.**
6. Avoid accidental starting. Don’t carry a plugged in tool with your finger on the switch. Be sure the switch is off before plugging the tool in.
7. Remove adjusting tools prior to using.
8. Don’t overreach. Keep proper footing and balance at all times.
9. Prior to use, check for damaged parts. If a tool has damaged parts don’t use it until it is repaired. Don’t use a tool that has a defective switch.
10. Use impact sockets with all impact wrenches.
11. Do not use electric tools in or near flammable liquids or in an explosive atmosphere. A hot work permit is required to operate tools in an area that may contain a hazardous atmosphere.
12. “HOT WORK” includes any operation capable of providing a source of ignition. Examples include tools with open brushes and commutators or any device that produces sparks or could become an ignition source. One of the dangers of hot work is the increase risk of fire and explosion because of the introduction of an ignition source into a space with an already hazardous atmosphere.

13. Use the right tool. Don't force a small tool to do the job of a heavy duty tool. Don't use a tool for a purpose it isn't intended. For example, don't use a circular saw for cutting tree limb or logs.
14. Secure work. Use clamps or a vise to hold your work.
15. When a tool is used outdoors, use only extension cords suitable for use outdoors.
16. Buffer/scrubber cords will be kept from the rotating pads while in use. Always walk on dry floors and work from the wet areas to the dry areas to prevent slipping. Never operate units close to furniture, other electrical cords, throw rugs, and window coverings.

## **AIR POWERED TOOLS**

1. Inspect tools and hoses for damage before using. Do not use until damage is repaired.
2. Wear hearing and eye protection.
3. Oil daily.

### ***§1707 – Power-Operated Hand Tools applies from Cal/OSHA***

## **PORTABLE CIRCULAR POWER SAWS**

1. Disconnect the power supply when not in use, before servicing and before changing the blade.
2. The teeth on the upper half of a portable circular power saw must be permanently guarded. The teeth on the lower half of the saw blade must be guarded by a telescopic or hinged guard.
3. Do not use dull or damaged blades.
4. Raise the lower guard only by the lift lever. Check the lower guard for proper operation before using. Raise the lower guard by the lift lever to insure that it moves freely and does not touch the blade or any other part.
5. Do not operate the saw if the lower guard does not move freely and close instantly.
6. Do not run the saw while it is at your side.
7. Secure the wood before sawing. Never hold pieces for cutting in your hand or across your legs.
8. Be aware that "kickback" can occur at any time. This is a tendency of the saw to lift and back out of the cut violently when the blade binds or encounters excessive

resistance. Using a dull blade or improperly supported work will increase the tendency for “kickback”.

9. When making rip cuts with power hand saws, don't place your hand behind the blade: the saw may “walk back” and injure or sever your fingers.
10. When operating a power saw, keep the cord away from the cutting area and position it so that it will not become caught on the work piece during the cutting operation.
11. Keep your second hand on the auxiliary handle and away from the blade. Do not attempt to remove cut material while the blade is moving.
12. Always observe that the lower guard is in the lowered position prior to placing the saw on the floor or bench.
13. The teeth on the upper half of the blade shall be permanently shielded from contact.
14. The lower half (point of operation) of the saw blade shall be guarded to the root of the teeth with a telescopic or hinged guard that, for normal operation, opens up as the saw is fed into the cut and automatically returns to the position covering the saw teeth when removed from the cut.
15. Do not use skill saws with guards clipped or shimmed open.

**EXCEPTION:** The guard described in subsection above is not required on hand-held portable powered cut-off saws used by fire/rescue personnel for rescue procedures and/or roof ventilation for smoke removal provided the operator is wearing appropriate eye, face, head and body protection as specified in Articles 10 and 10.1 of the General Industry Safety Orders. This exception also applies to qualified persons (e.g. instructors) wearing personal protective equipment as described herein to instruct personnel in safe roof ventilation/rescue techniques.

16. Telescopic guards shall be equipped with a lifting lug or lever, remote from the blade teeth that will permit the operator to safely shift the guard for starting unusual cuts.
17. Saws with hinged guards shall be equipped with 2 handles so arranged that neither hand is exposed to the hazard of the rotating blade. One handle shall be on the hinged guard, and of such design that its use will avoid exposure of the hand or fingers between the retracted guard and the blade.
18. Guards shall not be prevented from operating automatically by pins, wedges, or other devices that hold them back in an inoperative position.
19. Saws with hazardous defects, such as damaged guards or switches, shall be removed from service until repairs are complete.

***§4307 – Portable Power Driven Circular Hand Saws applies from Cal/OSHA***

**TABLE SAW**

1. Eye and hearing protection must be worn while operating the saw.
2. Keep guards in place and in working order.
3. Do not pick up the table saw by the fence rails.
4. Disconnect saw from power source before servicing, changing a blade or when you are through using.
5. Lower saw blade when you are done using.
6. Feed work into the blade against the direction of rotation of the blade only.
7. Be sure all clamp handles are tight before operating.
8. Keep the blade sharp and properly set.
9. Use the anti-kickback device.
10. Keep the table clean and dry.
11. Periodically recheck alignment during use.
12. Do not use blades of larger diameter than recommended.
13. Keep your fingers away from the blade, use a push stick to feed the wood through the saw.
14. All power tools must comply with the below:

***§3556 – General; §1707 – Power-Operated Hand Tools; §3425 – Portable Power Hand Tools applies from Cal/OSHA***

## **GAS POWERED EQUIPMENT**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Always use hearing protection when operating gas powered equipment.
3. Only use equipment in a well ventilated area.
4. Always check oil and/or use proper fuel for the equipment being used.
5. Do not refuel equipment indoors.
6. Allow equipment to cool before refueling.
7. Never refuel or remove gas cap while equipment is running.
8. NO SMOKING while refueling equipment.
9. Never store the machine or fuel inside where there is an open flame.
10. Disconnect spark plug wire and keep it away from the spark plug when servicing the equipment to prevent accidental starting.
11. Keep equipment clean and free of debris, oil and fuel mixtures.
12. Allow equipment to cool at least 5 minutes before storing.
13. **CAUTION:** Mufflers are extremely hot during and after operation. Use extreme care when handling the equipment.

### ***§3319 –Fueling; and §4998 – Refueling applies from Cal/OSHA***

## **CHAIN SAWS AND CONCRETE CHAIN SAW**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Combination Safety Helmet (ear, face, and head protection) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could drop or cause falling objects, cause hearing loss, or eye injury.

### ***§3381 – Head Protection applies from Cal/OSHA***

3. Leg protection (chaps, pads, or inserts) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could cut or puncture the skin.

4. **For concrete saw rain gear shall be worn over the leg protection and upper body as well.**
5. Employees, such as fallers, buckers, limbers, choppers, landing chasers, and others performing similar operations, who operate chain saws, shall use leg protection (chaps, pads, or inserts).

***§6283(a) – Portable Chain Saw Operations applies from Cal/OSHA***

6. Inspect the saw daily to assure that all handles and guards are in place and tight, all controls function properly, and the muffler is operative.
7. Properly instruct operators on safe operation and adjustment.
8. Each chain saw placed in service on or after May 5, 1995 shall be equipped with a chain brake and shall otherwise be provided with a label or plate stating that it meets the requirements of the ANSI B175.1-1991 "Safety Requirements for Gasoline-Powered Chain Saws". Chain saws placed in service before May 5, 1995 shall be equipped with a protective device that minimizes chain-saw kickback. No chain-saw kickback device shall be removed or otherwise disabled.
9. All chain saws shall be equipped with a control that when released returns the saw to idling speed.
10. Exhaust manifolds on gasoline motors shall be constructed and maintained so that exhaust fumes are directed away from the operator.
11. Power saws shall be equipped with a clutch so adjusted that at idling speed it will not engage the chain drive.
12. Loose materials that may catch the saw shall be removed.
13. All power saws shall be equipped with a positive off-and-on switch.
14. Power cables on electric units shall be properly insulated. Care shall be taken to see that cables are in the clear at all times.
15. Electric saw and generator units shall be bonded together and grounded.
16. The cable on electric units shall be disconnected while moving the saw through brush and thickets, or where the character of the ground obstructs the free movement of the fallers.
17. Fuel the saw only in conditions not conducive to fire hazards. Always use caution when handling fuel. Move the saw at least 10 feet away from fueling area before starting the saw. Never fuel the saw indoors. Do not use engine fuel for starting fires or as a cleaning solvent.

18. **For concrete saw special fuel mix marked 25 to 1 with synthetic oil shall be used for fuel. Mixtures for chainsaws and weed trimmers will burn up the saw.**
19. Start the saw at least 10 feet away from fueling area.
20. Start the saw only when firmly supported. Before starting the saw make sure the chain or wheel is not contacting anything.
21. **For concrete saw a constant water** supply of at least 60 pounds pressure shall be supplied to the saw for cooling.
22. Always hold the saw with both hands when the engine is running. Use a firm grip with thumbs and fingers encircling the handles.
23. Always carry the saw with the engine stopped, the muffler and saw chain or wheel away from your body.
24. Be ready to hold the saw up when you finish the cut so it will not drop.
25. Never make one-handed cuts.
26. Do not overreach or cut above shoulder height.
27. Always bring the saw up to speed before letting the chain or wheel come in contact with the material to be cut. Once contact is made, keep cutting at a steady speed.
28. “KICKBACK” may occur during chain saw use when the tip of the guide bar touches an object. Tip contact, in some cases, may cause a lightening fast and violent reaction, kicking the guide bar up and towards the operator.
29. The following steps are recommended to reduce the chance of “kickback”:
  - a. Avoid letting the tip of the guide bar from coming in contact with any object.
  - b. Avoid using the tip of the bar for cutting. Cut well back on the straight part of the bar.
  - c. Be sure to keep the chain sharp and properly tensioned.
  - d. Use extreme caution when cutting brush, hedges and other “whippy” material. Cut only one piece at a time and make sure the tip is clear at all times.
  - e. Never bore with the tip of the saw when ever possible.

## CUT-OFF SAWS

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Combination Safety Helmet (ear, face, and head protection) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could drop or cause falling objects, cause hearing loss, or eye injury.

### ***§3381 – Head Protection applies from Cal/OSHA***

3. Leg protection (chaps, pads, or inserts) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could cut or puncture the skin.

### ***§6283(a) – Portable Chain Saw Operations applies from Cal/OSHA***

4. Use the proper cutting wheel for the material you are about to cut.
5. Abrasive wheel for cutting steel or cast iron pipe and re-bar. Black carbide blade is used for ductile iron pipe only. Do not use black blade for steel or cast iron pipe. It will ruin it. Use the dry cement blade to cut concrete or asphalt.
6. Fuel the saw only in conditions not conducive to fire hazards. Always use caution when handling fuel. Move the saw at least 10 feet away from fueling area before starting the saw. Never fuel the saw indoors. Do not use engine fuel for starting fires or as a cleaning solvent.
7. Start the saw at least 10 feet away from the fueling area.
8. **Start the saw only when firmly supported. Before starting the saw make sure the chain or wheel is not contacting anything.**
9. Always hold the saw with both hands when the engine is running. Use a firm grip with thumbs and fingers encircling the handles.
10. Always carry the saw with the engine stopped, the muffler and saw chain or wheel away from your body.
11. Be ready to hold the saw up when you finished the cut so it will not drop.
12. Never make one-handed cuts.
13. With a cut-off saw, use a back and forth cutting action. Try to keep the wheel moving at all times. Avoid putting side pressure on the cutting wheel. Cut only material that is specified on each cutting wheel.

14. When cutting large diameter pipe, work around the pipe rather than through the pipe, keeping as little of the wheel in contact with the work as possible.
15. Never use a cut-off saw to cut asbestos-cement pipe. (Transite)
16. Keep handle free of oil and fuel mixture.
17. Before starting the saw make sure the wheel is not contacting anything.
18. Shut off the saw before setting it down. Never leave the engine running unattended.

***§6283 – Portable Chain Saw Operations applies from Cal/OSHA***

**WEED TRIMMER**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Combination Safety Helmet (ear, face, and head protection) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could drop or cause falling objects, cause hearing loss, or eye injury.

***§3381 – Head Protection applies from Cal/OSHA***

3. Leg protection (chaps, pads, or inserts) shall be worn while operating weed trimmers, chain saws, cut-off saws, hedge trimmers, or any work that could cut or puncture the skin.

***§6283(a) – Portable Chain Saw Operations applies from Cal/OSHA***

4. Keep bystanders and any vehicles at least 30 feet away when starting or operating the equipment. Have people and vehicles removed from the area prior to starting the job.
5. Inspect the area to be cut. Remove all debris and objects that could be thrown, become entangled in the cutting head or cause damage during cutting. All trash, bottles, cans, and any fence wire must be removed prior to starting the job.
6. Keep the handles free of oil and fuel mixture.
7. Never use the unit without the guard in place.
8. Never use a wire in place of the nylon monofilament cutting lines.
9. Make sure the cutting head stops turning when the throttle lever is released and the engine is running at idle speed.
10. Operate the unit from your right side only.

11. Always cut with the unit running at full throttle.
12. Guide the unit in a semicircular motion from left to right. To clear large areas, guide the unit over a semicircular area of about 6-7 feet at a time. Move forward about 5 inches after each cut.
13. Use a slow, deliberate action to cut heavy growth.
14. Try to control the cutting action with your hip rather than placing the full workload on your arm or hands.
15. Take precautions to avoid wire, grass, and dead long-stemmed weeds from wrapping around the head of the shaft.

## **CONCRETE GRINDER**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Hard hat and safety vests are required. Hearing, eye and dust mask type respiratory protection is required.
3. Keep bystanders and any vehicles at least 30 feet away when starting or operating the equipment. Have people and vehicles removed from the area prior to starting the job.
4. Check all bolts for tightness.
5. Follow rules for gas powered equipment prior to fueling and starting.
6. Inspect the grinding drum before use. Use the right drum for asphalt and concrete.
7. Do not leave the machine unattended. Use a firm grip while operating. If you let go the machine will run away from you.
8. Before leaving the machine, raise the cutter control and switch off the engine and secure the machine from accidental movement.
9. Following servicing and repair work the protective devices must be re-fitted in the proper way. Follow all proper procedures for working with gasoline powered equipment.

## **CONCRETE SAW**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Hard hat and safety vests are required. Hearing, eye and dust mask type respiratory protection is required.
3. Keep bystanders and any vehicles at least 30 feet away when starting or operating the equipment. Have people and vehicles removed from the area prior to starting the job.
4. Follow all proper procedures for working with gas-powered equipment.
5. Follow all general safety rules for gas-powered equipment.
6. Make sure that the proper type of blade is installed for the type of material you are cutting. Use the right cutting wheel for asphalt and concrete.
7. You must use water to cool the blade while cutting.
8. Be aware that the material you are cutting will be wet and may become slippery.
9. Make sure all guards are in place and check bolts for tightness.
10. Do not bind the blade in the cut. It may be necessary to remove the blade from the cut and restart the cut if the cutting angle changes.
11. Shut off the fuel valve when not in use.
12. Do not leave the machine unattended. Use a firm grip while operating. If you let go the machine will run away from you.
13. Before leaving the machine, raise the cutter control and switch off the engine and secure the machine from accidental movement.
14. Following servicing and repair work the protective devices must be re-fitted in the proper way. Follow all proper procedures for working with gasoline powered equipment.

## **WACKER TYPE COMPACTOR AND VIBRATORY TYPE PLATES**

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Hard hat and safety vests are required. Hearing, eye and dust mask type respiratory protection is required.

3. Keep bystanders and any vehicles at least 30 feet away when starting or operating the equipment. Have people and vehicles removed from the area prior to starting the job.
4. Follow all proper procedures for working with gas powered equipment.
5. Follow all general safety rules for gas-powered equipment.
6. Use foot, hearing and hand protection.
7. Make sure hands, feet and clothing are at a safe distance from any movable parts prior to starting.
8. Allow machine to warm up prior to any compacting operation.
9. Exhaust manifolds on gasoline motors are very hot, be aware of its location at all times. Do not touch or allow it to rest against your body while operating the machine.
10. Use a firm grip while operating. If you let go the machine will run away from you.
11. Do not bear down on the machine.
12. Use both hands to guide the compactor.

#### **AIRLESS PAINT SPRAYER**

1. Never put fingers near the spray tip or aim the spray gun toward any part of the body.
2. If a leak should occur in any line or fitting, shut off the machine immediately. DO NOT attempt to control the leak with you hand or any part of your body.
3. Never attempt to change the spray tip without first shutting off the unit and releasing the pressure.
4. When operating the fluid control valves turn the valves slowly to let pressure transfer gradually.
5. Do not spray solvent under pressure through the tip. To prevent explosion or fire, always remove the tip before cleaning with solvent.
6. Do not allow hose to become kinked or to vibrate against rough or sharp surfaces. Inspect hoses frequently for wear.
7. Inspect the machine frequently for loose fittings, bolts, butts and screws.
8. Follow all safety rules for gas powered equipment.

***§3559.1 – Airless Spray Guns; §5453 – Operation and Maintenance  
applies from Cal/OSHA***

## LAWN TRACTOR

### General Operation

1. Consult the operator's manual prior to operating annually and as needed for anything you are not familiar with.
2. Clear the area to be mowed of objects that could be thrown by the blades.
3. Never operate the mower on wet grass with standing water.
4. Be sure that area is clear of people before mowing. Stop the machine if anyone enters the area you are mowing.
5. Never carry passengers.
6. Do not mow in reverse.
7. Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without the entire grass catcher or guard in place.
8. Slow down before turning.
9. Never leave a running machine unattended. Always turn off blades, set park brake, stop engine and remove keys before dismounting.
10. Turn off blades when not mowing.
11. Stop engine before removing grass catcher or unclogging chute.
12. Mow only in daylight or good artificial light. If mower is equipped with lights, they shall be on at all times.
13. Watch for traffic when operating machine near or crossing roadways.
14. Use extra care when loading or unloading the machine into a truck or trailer.

### Slope Operation

1. Slopes are a major factor related to loss-of-control and tip over accidents, which can result in severe injury or death. If you cannot back up a slope or feel uneasy, **DO NOT MOW IT!!!**
2. Mow up and down slopes not across it.
3. Remove obstacles such as tree limbs, rocks, etc.

4. Watch for holes, ruts or bumps. Uneven terrain can cause the machine to overturn. Tall grass can hide obstacles.
5. Use slow speed. Choose a low gear so you won't have to shift or stop while on a slope.
6. Use extra care when using the grass catcher or other attachments. They change the stability of the tractor.
7. Keep all movement on slopes slow and gradual. Do not make sudden changes in speed and direction.
8. Avoid starting and stopping on slopes. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
9. Do not turn on slopes unless necessary, and then turn slowly and gradually downhill, if possible.
10. Do not mow near drop-offs, ditches, or embankments. The mower could suddenly overturn if a wheel is over the edge of a drop-off, or if the edge caves in.
11. Do not mow on wet grass. Reduced traction could cause sliding.
12. Do not try to stabilize the machine by placing your foot on the ground.
13. Do not use the grass catcher on steep slopes.
14. Do not operate mower on slopes greater than 15 degrees.

#### Use Around Children

1. Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. **NEVER** assume that children will remain where you last saw them.
2. Keep children out of the mowing area.
3. Be alert and shut down the machine if a child enters the mowing area.
4. Before and when backing up, look behind and down for small children.
5. Never carry children. They may fall off and be seriously injured.
6. Never allow children to operate the machine.
7. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

## Servicing

1. Use extra care in handling gasoline and other fuels. They are flammable and vapors can be explosive.
2. Use only approved containers.
3. Never remove gas cap or add fuel with the engine running.
4. Allow engine to cool before refueling. Do not smoke.
5. Never fuel the machine indoors.
6. Never store the machine or fuel container indoors where there is an open flame.
7. Never run the machine inside a closed area.
8. Keep nuts and bolts, especially blade attachments bolts, tight and keep equipment in good condition.
9. Never tamper with safety devices. Check their proper operation regularly.
10. Keep machine free of grass and debris build-up. Clean up fuel and oil spillage. Allow machine to cool before storing.
11. Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
12. Never make repairs or adjustments with the machine running.
13. Inspect grass catcher components frequently for wear, damage or deterioration.
14. Mower blades are sharp and can cut. Wrap the blade or wear gloves, and use extra caution when servicing them.
15. Check brake operation frequently. Adjust and service as required.

## **PUSH MOWERS**

1. Keep the area of operation clear of all persons, particularly small children.
2. Inspect the area to be mowed for any obstacles that could be thrown and remove them.
3. Wear eye and hearing protection when using the mower.
4. Do not hold onto the mower if you are falling, release the handle immediately.
5. Never pull the mower towards you while you are walking. If you must back the mower away from an obstruction, follow these steps:
  - a. Step back from the mower to fully extend your arms.
  - b. Be sure you are well balanced with sure footing.
  - c. Pull the mower back slowly, no more than halfway towards you.
  - d. Repeat as necessary.
6. The blade control handle is a safety device. Do not attempt to by-pass its operation.
7. Never operate the mower on wet grass with standing water. Always be sure of your footing.
8. Stop the blade when crossing gravel paths, drives, or roads.
9. If the machine starts to vibrate, stop it immediately and check for the cause.
10. Never operate the mower without the proper guards attached.
11. DO NOT put your hands or feet near the rotating parts, keep clear of the discharge at all times.
12. The muffler and engine become hot and can cause burns. Do not touch.

### Slope Operation

1. Do not operate on slopes greater than 15 degrees.
2. Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction.
3. Watch for holes, ruts, bumps and hidden objects. Tall grass can hide obstacles.

4. Always be sure of your footing. A slip and fall can cause serious personal injury. REMEMBER: if you start to fall release the blade control handle immediately.

### Servicing

1. Before cleaning, repairing, or inspecting make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep it from contacting the spark plug.
2. Inspect the blade and engine mounting bolts before use for proper tightness. Also, inspect the blade for damage.
3. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
4. Never tamper with safety devices. Check for proper operation regularly.
5. After striking a foreign object, stop the engine, remove the spark plug wire and thoroughly inspect the mower for damage. If damaged, repair the damage before starting or operating the mower.
6. Never attempt to make a wheel or cutting length adjustment while mower is running.
7. Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, use caution when servicing them.
8. Do not change the engine governor setting or overspeed the engine. Excessive engine speeds are dangerous.

## **ELECTRICAL WELDING**

### **Ventilation Requirements for Welding, Brazing, and Cutting**

1. Mechanical Ventilation for Indoor Operations. Local exhaust systems providing a minimum air velocity of 100 lineal feet per minute in the welding zone shall be used except as otherwise specified by this section.
2. Where local exhaust ventilation is not feasible, mechanical dilution ventilation sufficient to prevent exposure to concentrations of airborne contaminants from exceeding those specified in Section 5155 shall be provided.
3. Respiratory protective equipment, in accordance with Section 1531, shall be used when the methods described below are not feasible.
  - a. Toxic Substances Used in Any Enclosed Space. Local exhaust ventilation shall be used when potentially hazardous materials are employed as base metals, fluxes, coatings, platings or filler metals. These include, but are not limited to the following materials:

- (1) Beryllium
  - (2) Cadmium
  - (3) Chromium
  - (4) Fluorides
  - (5) Lead
  - (6) Mercury
  - (7) Zinc
  - (8) Inert-gas metal-arc welding or oxygen cutting of stainless steel.
- b. When the nature of the work is such that local exhaust ventilation is not an effective means for preventing potentially hazardous exposure levels, as specified by Section 5155, supplied-air respirators shall be worn.
  - c. Toxic Substances Used in the Open Air. Where toxic substances such as those listed in paragraph 1 are used, respiratory protective equipment, in accordance with Section 1531, shall be provided except as otherwise specified by this subsection.
    - (1) In operations involving beryllium-containing base or filler metals, only supplied-air respirators shall be used.
    - (2) Except for operations involving beryllium, cadmium, lead, or mercury, respiratory protective equipment is not required when natural or mechanical ventilation is sufficient to remove welding fumes from the breathing zone of the workers.
  - d. Improper Use of Welding Gases. Compressed gases used for welding and cutting shall not be used for ventilation purposes, comfort cooling, blowing dust from clothing, or cleaning the work area.
  - e. Chlorinated Hydrocarbons. Degreasing or other operations involving chlorinated hydrocarbons shall be located or controlled such that vapors from these operations will not enter the atmosphere surrounding any welding or cutting operations to prevent the degradation of such chlorinated hydrocarbon vapors to more highly toxic gases by the action of heat or ultraviolet radiation.
  - f. Precautionary Labels. Hazardous materials used in welding and cutting shall bear precautionary labels as required.

### **Welding, Cutting, and Heating of Coated Metals**

1. Before welding, cutting, or heating is commenced on any surface covered by a preservative coating or unknown flammability, a test shall be made by a qualified person to determine its flammability.
2. Precautions shall be taken to prevent ignition of highly flammable hardened preservative coatings. When coatings are determined to be highly flammable, they shall be stripped from the area to be heated to prevent ignition.
3. All surfaces covered with toxic preservatives, including coatings which generate toxic substances upon heating, shall be stripped for a distance of at least four inches from the area of heat application, or employees shall be required to use supplied-air respirators.

### **Eye Protection for Grinding and Chipping**

1. Employees working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays which are inherent in the work or environment, shall be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby employees.
2. The City shall provide and ensure that employees use protection suitable for the exposure.
3. Where eye protection is required and the employee requires vision correction, such eye protection shall be provided as follows:
  - a. Safety spectacles with suitable corrected lenses, or
  - b. Safety goggles designed to fit over spectacles, or
  - c. Protective goggles with corrective lenses mounted behind the protective lenses.

**NOTE:** Wearing of contact lens is prohibited in working environments having harmful exposure to materials or light flashes, except when special precautionary procedures, which are medically approved, have been established for the protection of the exposed employee.

4. Design, construction, testing and use of devices for eye and face protection purchased after January 12, 1995 shall be in accordance with the American National Standard, Practice for Occupational and Educational Eye and Face Protection, Z87.1-1989, which is hereby incorporated by reference, except that integral lens and frame design will be allowed if the lens frame combination provides unit strength, as well as impact, penetration, heat and flammability resistance, optical qualities and eye zone coverage equal to or greater than is required by ANSI Z87.1-1989.

5. Eye and face protection purchased on or before January 12, 1995 shall be designed, constructed and used in accordance with the American National Standard (ANSI) Z87.1-1968, which is hereby incorporated by reference.
6. Side shield protection shall be used whenever the hazard of flying objects is angular as well as frontal.

### **Eye Protection for Welding**

1. Where exposed to injurious light rays, the shade of lens to use in any instance shall be selected in accordance with the following table.
2. Protection against radiant energy-selection of shade numbers for welding filter. Table EP-1 shall be used as a guide for the selection of the proper shade numbers of filter lenses or plates used in welding. Shade more dense than those listed may be used to suit the individual's needs.

TABLE EP-1--FILTER LENS SHADE NUMBERS FOR PROTECTION AGAINST  
RADIANT ENERGY

<b>Welding Operation</b>	<b>Shade Number</b>
Shielded metal-arc welding 1 1/16-, 3/32-, 1/8, 5/32-inch diameter electrodes	10
Gas-shielded arc welding (nonferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	11
Gas-shielded arc welding (ferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	12
Shielded metal-arc welding 3/16-, 7/32-, 1/4-inch diameter electrodes	12
5/16-, 3/8-inch diameter electrodes	14
Atomic hydrogen welding	10-14
Carbon-arc welding	14

### **Protective Clothing and Gloves**

Protective clothing, including gloves, shall be worn by employees within the areas exposed to radiation so that the skin is covered completely to prevent burns and other damage by ultraviolet rays. Shirts worn shall be dark in color to reduce reflection to the face from underneath the helmet. Welding helmets and hand-held shields shall be free from leaks and openings and free of highly reflective surfaces.

**NOTE:** Cotton clothing should be covered since it disintegrates rapidly when exposed to high intensities of ultraviolet rays.

### **Welding Procedure**

1. Where the work permits, the welder shall be enclosed in an individual booth painted with a finish of low reflectivity, such as zinc oxide and lamp black, or shall be enclosed with noncombustible screens having a similar low reflectivity finish. Booths and screens or shields shall permit circulation of air at floor level. Workers or other persons adjacent to the welding areas shall be protected from the rays by noncombustible or flameproof screens or shields or shall be required to wear appropriate goggles.
2. Welding machines shall be left on the outside of a confined space and heavy portable equipment shall be blocked to prevent accidental movement.
3. When operations are suspended for any substantial period of time, such as during lunch or overnight, welding machines shall be shut off at some point outside the confined space. Where practicable, the electrodes and electrode holders shall be removed from the confined space. All electrodes shall be removed from the holders and the holders carefully located to prevent accidental contact. Upon completion or discontinuance of welding operations, the welder shall provide some means of warning other workers of the location of hot metal.

### **Manual Electrode Holders**

1. The City shall ensure that only manual electrode holders intended for arc welding and cutting and capable of handling the maximum current required for such welding or cutting shall be used.
2. Current-carrying parts passing through those portions of the holder gripped by the user and through the outer surfaces of the jaws of the holder shall be insulated against the maximum voltage to ground.

### **Welding Cables and Connectors**

1. Arc welding and cutting cables shall be insulated, flexible and capable of handling the maximum current required by the operations, taking into account the duty cycles.
2. Only cable free from repair or splice for 10 feet (3m) from the electrode holder shall be used unless insulated connectors or splices with insulating quality equal to that of the cable are provided.
3. When a cable other than the lead mentioned in Subsection (e)(2) wears and exposes bare conductors, the portion exposed shall not be used until it is protected by insulation equivalent in performance capacity to the original.
4. Insulated connectors of equivalent capacity shall be used for connecting or splicing cable. Cable lugs, where used as connectors, shall provide electrical contact. Exposed metal parts shall be insulated.

## **Ground Returns and Machine Grounding**

1. Ground return cables shall have current-carrying capacity equal to or exceeding the total maximum output capacities of the welding or cutting units served.
2. Structures or pipelines, other than those containing gases or flammable liquids or conduits containing electrical circuits, may be used in the ground return circuit if their current-carrying capacity equals or exceeds the total maximum output capacities of the welding or cutting units served.
3. Structures or pipelines forming a temporary ground return circuit shall have electrical contact at all joints. Arcs, sparks or heat at any point in the circuit shall cause rejection as a ground circuit.
4. Structures or pipelines acting continuously as ground return circuits shall have joints bonded and maintained to ensure that no electrolysis or fire hazard exists.
5. Arc welding and cutting machine frames shall be grounded, either through a third wire in the cable containing the circuit conductor or through a separate wire at the source of the current. Grounding circuits shall have resistance low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current.
6. Ground connections shall be mechanically and electrically adequate to carry the current.
7. When electrode holders are left unattended, electrodes shall be removed and holders placed to prevent employee injury.
8. Hot electrode holders shall not be dipped in water.
9. The City shall ensure that when arc welders or cutters leave or stop work or when machines are moved, the power supply switch shall be kept in the off position.
10. Arc welding or cutting equipment having a functional defect shall not be used.
11. The control apparatus of arc welding machines shall be enclosed except for operating wheels, levers and handles.
12. Input power terminals, tap change devices and live metal parts connected to input circuits shall be enclosed and accessible only by means of insulated tools.
13. When arc welding is performed in wet or high humidity conditions, employees shall use additional protection, such as rubber pads or boots, against electric shock.

### **Resistance Welding**

1. All suspended portable welding gun equipment, with the exception of the gun assembly, shall be equipped with a support system capable of supporting the total shock load in the event of failure of any component of the supporting system.

**NOTE:** The system should be designed to be fail-safe. The use of devices such as secondary cables, chains, clamps, etc., is considered satisfactory.

2. Where it enters the gun frame, the movable holder mechanism shall be designed so as to present no shear points to the fingers placed on the operating movable holder; otherwise, guarding shall be provided.
3. One or more safety emergency stop buttons shall be provided on all multi-spot welding machines, with a minimum of one stop button at each operator's position.
4. Periodic inspection of resistance welding equipment shall be made by qualified personnel and a certification record maintained. The certification record shall include the date of the inspection, the signature of the person who performed the inspection, and the serial number or other identifier of the equipment inspected. The operator shall be instructed to report equipment defects to the supervisor.

### **Inert-gas Metal-arc Welding**

1. Employees shall not engage in and shall not be exposed to the inert-gas metal-arc welding process unless the following precautions are taken:
2. Chlorinated solvents shall not be used within 200 feet (61 m) of the exposed arc. Surfaces prepared with chlorinated solvents shall be thoroughly dry before welding is performed on them.
3. Employees in areas not protected from the arc by screening shall be protected by appropriate filter lenses in accordance with the requirements of Section 3382. When welders are exposed to their own arc or to each other's arc, filter lenses complying with the requirements of Section 3382 shall be worn to protect against flashes and radiant energy.
4. Employees exposed to radiation shall have their skin covered completely to prevent ultraviolet burns and damage. Helmets and hand shields shall not have leaks, openings or highly reflective surfaces.
5. Inert-gas metal-arc welding on stainless steel shall not be performed unless exposed employees are protected either by local exhaust ventilation or by wearing supplied air respirators.

***§8357 – Inert-Gas Shielded Metal-Arc Welding applies from Cal/OSHA***

6. Employees shall not be permitted or required to operate such equipment until they have been thoroughly instructed in its use, and have knowledge of the hazards involved. Before starting operations, the following shall be complied with:
7. Before starting to work in an area used for purposes other than welding, permission to weld shall be obtained from the supervisor directly responsible.
8. General ventilation for such operations shall be installed.
9. Local exhaust ventilation or supplied-air respirators shall be provided in all cases when doing inert-gas shielded metal-arc welding of stainless steel, lead, zinc, beryllium, copper, or cadmium to protect against dangerous concentrations of toxic gases and fumes.
10. The use of chlorinated solvents shall be kept away from the exposed arc; surfaces prepared with chlorinated solvents shall be steamed and thoroughly dried or otherwise cleaned of chlorinated solvents before welding is permitted on such surface.
11. Where inert-gas shielded metal-arc welding is being used, employees and others in the area not protected by screening shall be provided with and shall wear shaded goggles, with side shields.
12. Protective clothing, including gloves, shall be worn by employees within the areas exposed to radiation so that the skin is covered completely to prevent burns and other damage by ultraviolet rays. Shirts worn shall be dark in color to reduce reflection to the face from underneath the helmet. Welding helmets and hand-held shields shall be free from leaks and openings and free of highly reflective surfaces.

**NOTE:** Cotton clothing should be covered since it disintegrates rapidly when exposed to high intensities of ultraviolet rays.

***§4850 – General; §3382(b) – Eye and Face Protection; §4851 – Arc Welding and Cutting; §4852 – Resistance Welding; §4853 – Inert-Gas Metal-Arc Welding; §8357 – Inert-Gas Shielded Metal-Arc Welding applies from Cal/OSHA***

## **GAS WELDING AND CUTTING**

### **Eye Protection for Grinding and Chipping**

1. Employees working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays which are inherent in the work or environment, shall be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby employees.
2. The City shall provide and ensure that employees use protection suitable for the exposure.
3. Where eye protection is required and the employee requires vision correction, such eye protection shall be provided as follows:
  - a. Safety spectacles with suitable corrected lenses, or
  - b. Safety goggles designed to fit over spectacles, or
  - c. Protective goggles with corrective lenses mounted behind the protective lenses.

**NOTE:** Wearing of contact lens is prohibited in working environments having harmful exposure to materials or light flashes, except when special precautionary procedures, which are medically approved, have been established for the protection of the exposed employee.

4. Eye and face protection purchased on or before January 12, 1995 shall be designed, constructed and used in accordance with the American National Standard (ANSI) Z87.1-1968, which is hereby incorporated by reference.
5. Side shield protection shall be used whenever the hazard of flying objects is angular as well as frontal.

### **Eye Protection for Welding**

1. Where exposed to injurious light rays, the shade of lens to use in any instance shall be selected in accordance with the following table.
2. Protection against radiant energy-selection of shade numbers for welding filter. Table EP-1 shall be used as a guide for the selection of the proper shade numbers of filter lenses or plates used in welding. Shade more dense than those listed may be used to suit the individual's needs.

TABLE EP-1--FILTER LENS SHADE NUMBERS FOR PROTECTION AGAINST  
RADIANT ENERGY

Soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 inch to 6 inches	4 or 5
Heavy cutting, over 6 inches	5 or 6
Gas welding (light), up to 1/8-inch	4 or 5
Gas welding (medium), 1/8-inch to 1/2-inch	5 or 6
Gas welding (heavy), over 1/2-inch	6 or 8

### **Protective Clothing and Gloves**

Protective clothing, including gloves, shall be worn by employees within the areas exposed to radiation so that the skin is covered completely to prevent burns and other damage by ultraviolet rays and molten steel spatter. Shirts worn shall be dark in color to reduce reflection to the face.

**NOTE:** Cotton clothing should be covered since it disintegrates rapidly when exposed to high intensities of ultraviolet rays.

### **General Precautions**

1. Mixtures of fuel and air or oxygen may be explosive and shall be guarded against. No device or attachment facilitating or permitting mixture of air or oxygen with combustible gases prior to consumption, except at the burner or in a standard torch or blowpipe, shall be allowed unless approved for the purpose.
2. Backflow protection shall be provided by an approved device that will prevent oxygen from flowing into the fuel-gas system or fuel from flowing into the oxygen system. The backflow protection device shall be installed on either the torch or at each station outlet (i.e., the point at which gas is withdrawn from the permanent piping) either upstream or downstream of the shutoff valve for the oxygen or fuel gas station outlet valve(s).
3. Acetylene shall not be generated, piped (except in approved cylinder manifolds) or utilized at a pressure in excess of 15 pounds per square inch gauge pressure.
4. The use of liquid acetylene shall be prohibited.
5. Oil or grease shall not be permitted to come in contact with oxygen cylinders, valves, regulators or other fittings. Oxygen cylinders and apparatus shall not be handled with oily hands or gloves, or greasy materials. A jet of oxygen shall not be permitted to strike an oily surface, greasy clothes or enter a fuel oil or other storage tank.
6. Oxygen shall not be used from a cylinder or cylinder manifold unless a pressure-reducing device intended for use with oxygen, and so marked, is provided.

7. Fuel-gas shall not be used from cylinders through torches or other devices equipped with shutoff valves without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.

**NOTE:** Low pressure air-gas torches may be used on small cylinders provided there is no shutoff valve on the torch.

8. Welding fuel-gas cylinders shall be placed with valve end up whenever they are in use. Liquefied gases shall be stored and shipped with the valve end up. Nothing shall be placed on top of an acetylene cylinder when in use which may damage the safety device or interfere with the quick closing of the valve.
9. Cylinders shall be handled carefully.

**NOTE:** Rough handling, knocks, and falls are liable to damage the cylinder, valve or safety devices and result in leakage.

10. Before connecting a regulator to a cylinder valve, the valve shall be opened slightly and closed immediately. (This action is generally termed "cracking" and is intended to clear the valve of dust or dirt that might otherwise enter the regulator). The valve shall be opened while standing to one side of the outlet; never in front of it. A fuel-gas cylinder valve shall never be opened up, cracked near other welding work or near sparks, flame, or other possible sources of ignition.

**EXCEPTION:** Hydrogen cylinders. See supplier's instructions before connecting the regulator.

11. Before a regulator is removed from a cylinder valve, the cylinder valve shall be closed and the gas released from the regulator.
12. If cylinders are found to have leaky valves or fittings which cannot be stopped by closing of the valve, the cylinders shall be taken outdoors away from sources of ignition and slowly emptied.
13. Cylinders having leaking fuse plugs or other leaking safety devices shall be plainly tagged, and the supplier shall be promptly notified of the condition and their instructions followed. A warning shall be placed near the cylinders prohibiting any approach to them with a lighted cigarette or other source of ignition.
14. Safety devices shall not be tampered with.
15. The cylinder valve shall always be opened slowly.
16. An acetylene cylinder valve shall not be opened more than one and one-half turns of the spindle, and preferably no more than three-fourths of a turn.
17. Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall not be

used. Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purpose.

18. Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.
19. Unalloyed copper shall not be used for acetylene or acetylenic compounds except in listed equipment.
20. When flammable gas lines or other parts of equipment are being purged of air or gas, open lights or other sources of ignition shall not be permitted near uncapped openings.
21. No welding or cutting shall be performed on an acetylene or oxygen pipeline, including the attachment of hangers or supports, until the line has been purged. Only oil-free air, oil-free nitrogen, or oil-free carbon dioxide shall be used to purge oxygen lines.
22. If pipeline protective equipment incorporates a liquid, the liquid level shall be maintained, and suitable antifreeze may be used to prevent freezing.
23. Cylinders shall be kept far enough away from the actual welding or cutting operation so that sparks, hot slag, or flame will not reach them, or fire-resistant shields shall be provided.
24. No person, other than the gas supplier, shall attempt to mix gases in a cylinder. No one, except the owner of the cylinder or person authorized by him, shall refill a cylinder.
25. Cylinders containing oxygen or acetylene or other fuel or gas shall not be taken into confined spaces.
26. When operations are suspended for any substantial period of time, such as during lunch or overnight, gas cylinders shall be shut off. Where practicable the torch and hose shall be removed from the confined space. Upon completion or discontinuance of welding operations, the welder shall provide some means of warning other workers of the location of hot metal.

***§4845 – General Precautions; §3382(B) – Eye and Face Protection;  
§8357(F) –Inert-Gas Shielded Metal-Arc Welding applies from Cal/OSHA***

## HAZARDOUS SUBSTANCES

1. All chemical hazards and other hazardous substances shall be handled in accordance with the written Hazard Communication section of our Injury and Illness Prevention Program. Copies of this program are available at City Hall.
2. Read the label on the containers and follow the manufacturer's instructions.
3. All chemicals are to be clearly labeled and kept in their correct place when not being used.
4. All secondary containers are to be clearly labeled for: type of hazard, emergency procedures and manufacturer's name and telephone number.
5. Don't mix cleaning chemicals. This can produce a highly toxic gas.
6. Make sure room is ventilated before using chemicals emitting strong vapors. Use a portable fan if necessary. Leave the room and warn others if fumes are too strong.
7. Material Safety Data Sheet (MSDS) are available for each hazardous chemical. MSDS's contain important emergency information that may be critical to an employee exposed to a hazardous substance. Know what a MSDS is and where to find them.
8. All chemicals are to be clearly labeled, and have Material Safety Data Sheets (MSDS) posted at the site. All employees are to be trained before using them.
9. Store chemicals in a safe manner and in accordance with the manufacturer's instructions. Separate chemicals that will react when combined.
10. Keep containers closed when not in use. Inspect containers and storage areas for leaks.
11. Use appropriate disposal methods for unused chemicals.
12. Be alert to the potential exposure to lead products. When cutting or sanding materials that may contain lead based paints, check with your supervisor prior to starting the work.
13. Asbestos materials may be present at any construction site where existing structures or facilities are worked on. Asbestos materials may be handled only by certified asbestos removal contractors and personnel. If asbestos is suspected to be present you must notify the job foreman immediately.

## **OFFICE AREAS**

1. Routinely inspect chairs for broken springs, loose wheels, screws or any other type of defect.
2. Don't store boxes where people might trip.
3. Use as much light as you need to get the job done without straining your eyes, report dusty or out-of-order lights promptly.
4. Fill bottom cabinet drawers first to prevent the cabinet from tipping, avoid overloading top drawers, close one drawer before opening another.
5. Be alert for electrical hazards such as frayed or bare wires, overload outlets or improperly grounded wires.
6. Avoid physical contact with toners or other chemicals. Wash your hand after adding toner to the copy machine.
7. When working at the computer minimize eyestrain by preventing glare. Adjust the angle of the screen, change viewing distance, alter the lighting by adjusting the blinds, etc. Adjust the brightness control as necessary. Keep the screen clean. Take periodic breaks: get up walk around, find another task that needs to be done away from the computer for a while.
8. Practice good posture, keeping your back straight, thighs supported and feet flat on the floor or on a footrest. Adjust your chair or the height of the keyboard.
9. Keep desk and file drawers closed when not in use.
10. Keep portable heaters away from flammable objects at all times, and out of the walkways.
11. Do not plug portable heaters into extension cords.

## **SAFETY COMMUNICATION**

It is our policy to maintain open communication between management and staff on matters pertaining to safety, your thoughts regarding safety are considered important, and we encourage your active participation in our safety program. Please feel free to express any of your safety concerns or suggestions during safety meetings, individually to your manager, or in writing. (Your notification may be anonymous if you so desire). Be assured that all safety suggestions will be given serious consideration, and that each will receive a response.

## **CORRECTIVE ACTION**

1. When it becomes necessary, City of Angels reserves the right to discipline employees who knowingly violate safety rules or policies. Disciplinary measures will include but not be limited to:
  - a. Verbal warning for minor offenses.
  - b. Written warning for more severe or repeated violations.
  - c. Suspensions without pay.
  - d. Termination of employment.
2. As employees are our most valuable resource, we hope that you will continue our organization's safety awareness and safe practices when you are away from the job as well as while at work.

## **VEHICLE INSPECTION PROCEDURE**

1. Approach vehicle: look for leaks of coolant, fuel or lubricants under the vehicle. Note body condition.
2. Under hood, check battery water level, oil level (and last oil change date), transmission fluid level, belt and hose condition and adjustment. Fill windshield washer reservoir.
3. Start engine for warm up. Check for abnormal noise and gauges for normal readings. Try steering wheel for excess play.
4. Depress brake pedal for excessive travel, mushy or hard feel.
5. Check horn and windshield wipers. Turn on all lights including emergency flashers. Check high and low beam.
6. Check tire inflation and tread.
7. Check emergency equipment including fire extinguisher, first aid kit, emergency triangles, spare tire, spare fuses and bulbs.
8. Walk around vehicle checking lights and reflectors.
9. Recheck all gauges, fasten seat belt, turn off lights and check the parking/emergency brake.
10. Make test stop within one block. Check operation of transmission.

## VEHICLE CHECK – REPAIR REQUEST

Vehicle # \_\_\_\_\_

Date: \_\_\_\_\_

Operator \_\_\_\_\_

Mileage: \_\_\_\_\_

**CHECK DEFECTS ONLY:** Explain under REMARKS

### GENERAL CONDITION

\_\_\_\_\_ Body, doors, windows

\_\_\_\_\_ Leaks

### ENGINE COMPARTMENT

\_\_\_\_\_ Fluid levels

\_\_\_\_\_ Belts

\_\_\_\_\_ Battery

### EXTERIOR

\_\_\_\_\_ Head lights, tail lights

\_\_\_\_\_ Signal brake lights

\_\_\_\_\_ Tires, wheels, spare

\_\_\_\_\_ Exhaust

\_\_\_\_\_ Suspension

\_\_\_\_\_ Emergency flashers

### BEHIND THE WHEEL

\_\_\_\_\_ Gauges

\_\_\_\_\_ Heater/Defroster

\_\_\_\_\_ Windshield wiper, washer

\_\_\_\_\_ Mirrors

\_\_\_\_\_ Horn

\_\_\_\_\_ Clutch

\_\_\_\_\_ Service Brake

\_\_\_\_\_ Parking, emergency brake

\_\_\_\_\_ Steering wheel

\_\_\_\_\_ Seat belts

\_\_\_\_\_ Emergency Equipment

### REMARKS

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### REPORTING DRIVER

\_\_\_\_\_

### MAINTENANCE

\_\_\_\_\_ Repairs made

\_\_\_\_\_ No repair needed

By: \_\_\_\_\_

Date: \_\_\_\_\_

## **Preventable Accidents – Motor Vehicle Operations**

The National Safety Council's definition of a preventable accident is:

"A preventable accident is any occurrence involving a City of Angels owned or operated vehicle which results in property damage and/or personal injury, regardless of who was injured, what property was damaged, to what extent, or where it occurred; in which the driver in question failed to do everything he reasonably could have done to prevent the occurrence".

### **Intersections**

The driver is responsible for approaching intersections prepared to take such action as is necessary to avoid accidents, regardless of the actions of other drivers. Failing to obey the law or to heed traffic control devices on the other driver's part does not automatically make the accident non-preventable. In making a determination, you should consider the driver's failure to take every precaution before entering the intersection. If a driver fails to check cross traffic to be sure that vehicles are going to stop, or if he forces the right-of-way instead of yielding, any resulting accident should be ruled preventable.

You must carefully review accidents involving special intersections such as alleys, driveways, plant entrances, etc., to determine what action the driver could have taken to avoid the accident. Many of these intersections are blind and the other driver's vision is blocked. Therefore, you can consider the failure to slow down, sound a warning or yield the right-of-way sufficient cause to rule the accident preventable.

### **Changing Traffic Lanes**

Passing is a voluntary action and failure to pass safely indicates that the driver made a faulty judgment or a lack of consideration of all the factors affecting the maneuver. Actions of oncoming traffic or of the traffic the driver is passing do not excuse him or her. The driver should anticipate and consider these actions before starting the maneuver.

The professional driver yields to a passing vehicle by slowing down or moving to the right if the passing driver is trapped and a sideswipe or cutoff is imminent.

Lane encroachment accidents on the highway or in merging traffic indicate an unwillingness to yield to vehicles or to wait for a safe break in traffic. Blind spots are not a valid excuse. The driver must use extra caution to allow for areas of limited vision.

The driver can avoid "squeeze plays" involving fixed objects or other vehicles by dropping back when it is apparent the other driver is forcing the issue or contesting a common portion of the road.

Pulling away from a parked position is a change of traffic lane and, as such, places responsibility on the driver pulling out. Any accident that results from your driver's actions while pulling out from the curb is preventable.

Failure to observe any of these defensive-driving techniques should result in the accident being ruled preventable.

### **Front-end & Rear-end Collisions**

The driver can prevent front-end collisions by always maintaining a safe following distance. Tailgating is one of the most frequent causes of accidents and is never excusable. Regardless of abrupt or unexpected stops or actions of the driver ahead, the driver must be able to stop safely. The driver must pay attention to the road ahead to anticipate the actions of the vehicle in front. The driver should adjust his or her speed at night so that the stopping distance is not greater than the forward distance illuminated by the headlights.

Drivers risk being struck from behind by failing to maintain a safe following distance. Failure to signal intentions or failure to slow down gradually for traffic signals or grade crossings, thus trapping the following driver, should be cause for ruling the accident preventable.

Rolling back into a vehicle is the result of not keeping the vehicle under control and is preventable.

### **Backing**

It is extremely rare that a backing accident is ruled not preventable. Even when a person is guiding the driver, the driver is responsible for backing safely. The guide is just an aid and cannot control the movement of the vehicle. The driver must check clearances for himself.

### **Turns**

Any time a professional driver leaves a traffic lane, the complete responsibility for the maneuver is his or hers. Signaling is not enough. The driver must check traffic on both sides and to the rear carefully before making a change. "Squeeze plays" resulting from left or right turns are the responsibility of the driver making the turn. If a driver fails to signal, signals too late, fails to properly position for the turn, to check mirrors before and during the turn or to take any other necessary defensive action, the resulting accident is preventable.

Accidents involving turns by other drivers require careful investigation. If the non-turning driver fails to recognize that a turn was pending from the actions of another vehicle and thus did not respond accordingly, or if he or she tried to force the right-of-way, the lack of defensive driving means the accident is preventable.

You should rule any accident involving a U-turn on your driver's part to be preventable.

## **Vehicles Going in Opposite Direction**

The head-on or sideswipe accident involving vehicles going in opposite directions is one of the most difficult to classify. Only by learning the exact actions of each vehicle prior to the accident can you determine whether the actions and maneuvers of the opposing vehicle should have given your driver adequate warning of a possible involvement.

If the opposing vehicle was passing and intruded into your driver's lane and he or she failed to slow down, stop or pull to the right, then the resulting accident is preventable because your driver failed to take proper defensive measures.

In making a determination you should also consider whether the passing driver warned the other driver by horn or flickering headlights.

## **Mechanical Failure**

Before starting a trip, a driver should inspect the vehicle and report unsafe conditions. The driver should obtain immediate repairs if continued operation could cause an accident. If a mechanical failure that the driver should have reasonably detected causes an accident, the accident is preventable.

If a mechanical defect occurs or develops during a trip the driver should notify management. If the driver continues the trip without such notification and an accident results, then the accident is preventable.

Abusive driving which creates abnormal strain and leads to mechanical failure resulting in an accident is also preventable.

## **Weather**

Rain, fog, snow, ice and sleet do not cause accidents. They are environmental conditions to which the driver must adjust. Failure to properly adjust driving to the existing conditions or to get off the road if conditions are severe should be sufficient to decide that the accident was preventable. Failure to use appropriate weather-related equipment that the organization provides should be considered as failure to adjust to conditions and any resulting accident to truck, cargo or property should be ruled preventable.

## **Fixed Objects**

You should consider collisions with fixed objects such as low overheads, buildings, poles as preventable accidents. Asking a bystander's opinion on clearance does not relieve the driver of his responsibility. Resurfaced pavement causing low overhead and other changes in conditions along a route are not valid excuses.

## **Pedestrians, Bicycles, Motorcycles**

The law generally considers that pedestrians have the right-of-way over vehicles even though their actions may be unorthodox. Shopping areas, school zones, play areas and areas of congested pedestrian traffic require reduced speeds; in many cases much below the posted limits. Rule any accident that results from the driver “going too fast for conditions” to be preventable.

Bicycles, mopeds and motorcycles frequently perform sudden, unexpected maneuvers. A driver, who fails to reduce speed, pull over, or otherwise take precautions when this type of equipment is near, has failed to take proper defensive driving measures and the accident is preventable.

## **Parked Vehicles**

Even though your vehicle is stationary, an accident can be ruled preventable. Unconventional parking locations, crooked parking, double parking, failure to put out warning devices, and so on reveal a lack of defensive driving. These actions make an accident preventable.

You should consider roll-a-ways of a parked vehicle to be preventable in almost all cases. Failure to properly block the wheels, not turning the wheels against the curb, or failure to take any other precaution to avoid vehicle movement, are lack of defensive driving techniques. Therefore, any accident resulting from such failure should be ruled preventable.

## **Non-Collision**

Jack-knifing, over-turning, running off the road are generally the result of emergency action taken to avoid a collision. Examine the driving immediately preceding the accident to determine whether the driver’s speed was unsafe for conditions or if he or she was tailgating or driving in some other manner that did not permit him or her to keep the vehicle under control. Committing any of these errors result in the judgment that the accident was preventable.

Dropping an improperly secured trailer when pulling out should be judged preventable if the driver could have foreseen the occurrence during his pre-trip inspection.

You must consider passenger accidents that do not involve collisions as preventable if they resulted from faulty driving.

Passenger injuries resulting from evasive action to avoid a collision are preventable if the driver failed to use defensive driving techniques, which would have eliminated the need for sudden or violent action. You must consider sudden starts or stops, speeding over bumpy roads, fast turns, and abrupt acceleration when operating a passenger vehicle as unsafe driving, even though such maneuvers would be acceptable with other types of vehicles. Any accidents resulting from such actions are preventable.

Damage to property or persons from projecting loads, losing part of a load, parts of the vehicle being loose (chains, doors) are preventable if the driver failed to properly secure them, or if the driver failed to secure them tightly during pre-trip inspection.

You should rule cargo damage resulting from violent maneuvers to avoid collision preventable if driving defensively would have eliminated the need for violent action. Damage caused by sudden starts, stops, fast turns, or speeding over bumpy roads, must be considered as a failure to adjust to conditions and is preventable.

### **Violations of Law or Your Organization's Policy**

If your driver violates the law or the organization's policy and the violation contributes to or causes an accident, then you should judge the accident to be preventable. This refers not only to moving vehicle violations, but also to technical violations such as the use of drugs to stay awake, lack of the required hours of sleep, or time off between trips.

### **Accident Situations Not Described**

For any accident not described, you should apply the same type of reasoning as illustrated by the National Safety Council's definition of a preventable accident to it.

### **Vehicle Struck From Behind**

Have any of your municipal vehicles been struck in the rear? Many times these "non-preventable" accidents are really preventable. That is, there is something your driver could have reasonably done to avoid the accident. Here are four things you can train your drivers to do to avoid this type of accident.

### **Signal Your Intentions**

Use your directional signals (or arm signals) and brake lights.

### **Stop Smoothly**

Come to a slow, smooth stop to alert a vehicle behind you that you are stopping. Abrupt stops might not give the driver behind you adequate warning that you are stopping.

### **Stay Away From Tailgaters**

- Never allow a tailgater to make you angry. Simply slow down or move to the right. This generally encourages the driver to pass you.
- Increase the following distances between your vehicle and the one ahead of you. This will eliminate the need to brake suddenly and reduce the chance of being hit by the tailgater.
- Force the driver to slow down, thereby making it easier for him to stop safely when you stop.

## **Avoid A Rear-End Collision When Stopped**

Being struck from the rear while stopped in traffic accounts for most rear-end collisions. This may happen to you when you are stopped in traffic:

- Keep a foot on the brake to activate the brake lights.
- Stop at least 10 feet behind the vehicle ahead to prevent any domino effect. A good way to do this is to stop so you can see the rear tires of the vehicle ahead.
- Keep lights on at dusk or in rain and snow.

**REMEMBER: The best “DEFENSE” against being rear-ended is to maintain adequate distance between you and the vehicle ahead of you.**